

## ABSTRACT

The traction module is preferably mounted on a propulsion tool to anchor the propulsion tool within the wellbore as the propulsion tool applies axial loads and torque to a drill bit. The traction module includes an inner expandable member and an outer member around the inner expandable member such that upon expanding the inner expandable member, the outer cover member expands into engagement with the wall of the borehole. The outer cover member is made of a non-stretchable material and likewise inner expandable member is preferably made from a non-stretchable material. The outer member is decoupled from the inner expandable member such that only the outer member is subjected to the axial and torsional loads of the propulsion system and the inner expandable member may or may not be expanded to its manufactured diameter. The outer cover member preferably includes a plurality of non-collapsible tubes for the passage of fluids through the traction module in its expanded position such that returns from the drilling may flow up the well annulus.

15